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10/750,280	12/30/2003	Frank Kilian	6570P011	9178

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SAP/BLAKELY
1279 OAKMEAD PARKWAY
SUNNYVALE, CA 94085-4040

EXAMINER	
TAHA, SHAQ	

ART UNIT	PAPER NUMBER
2146	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/750,280	KILIAN, FRANK	
	Examiner	Art Unit	
	Shaq Taha	2146	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) _____ is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1 - 30 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- Claims 1 - 6 and 25 - 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matena et al. (US 7,302,609), and further in view of Brey et al. (US 2005/0108395).

Regarding claim 1, 25 Matena teaches a method comprising: establishing communication between a plurality of non-Java-based server nodes of a first instance and a plurality of Java-based server nodes of a second instance via an intermediate server, **[a flexible and extensible execution control system for distributed computer systems including multiple nodes interconnected through a network, (Abstract), wherein the multiple nodes are connected in a communication system via an intermediate server, These clustered servers are designed to allow applications to execute on multiple identically-configured J2EE server processes and perform transactions on data in a shared database, (Column 3, line 11)];**

Matena et al. differs from the claimed invention is that generating a packet to be transmitted from one of the non-Java-based server nodes to one of the Java-based server nodes is not taught in Matena et al.

Brey et al. teaches generating a packet to be transmitted from one of the non-Java-based server nodes to one of the Java-based server nodes, **[A client node sends a packet to the server node, (Paragraph 0031)];**

specifying in a header of the packet an address of a destination Java-based server node and information that indicates that the packet is generated by one of the non-Java-based server nodes, **[The access table is stored at the server node, and the table is sent in the packet as information, (Paragraph 0029)];**

forwarding the packet to the intermediate server from the one of the non-Java-based server nodes, **[The server node receives the packet, STEP 602, and uses the access table to identify the allowable resources, (Paragraph 0032)];**

and forwarding the packet to the destination Java-based server node from the intermediate server based on the address provided in the header of the packet, **[The packet is rejected, Otherwise, the request is serviced, STEP 610. For example, data is written to or read from a particular device, (Paragraph 0032)].**

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Matena by generating a packet to be transmitted from one of the non-Java-based server nodes to one of the Java-based server nodes as taught by Brey.

One of ordinary skill in the art would have been motivated to make this modification in order to provide the advantage of generating a packet to be transmitted from one of the non-Java-based server nodes to one of the Java-based server nodes.

Regarding claim 2, 26 Brey et al. teaches that the method further comprising:

generating a second packet to be transmitted from one of the Java-based server nodes to one of the non-Java-based server nodes, **[A client node sends a packet to the server node, (Paragraph 0031)];**

specifying in a header of the second packet an address of a destination non-Java-based server node and information that indicates that the packet is generated by one of the Java-based server nodes, **[The access table is stored at the server node, and the table is sent in the packet as information, (Paragraph 0029)];**

forwarding the second packet to the intermediate server from the one of the Java-based server nodes, **[The server node receives the packet, STEP 602, and uses the access table to identify the allowable resources, (Paragraph 0032)];**

and forwarding the second packet to the destination non-Java-based server node from the intermediate server based on the address provided in the header of the second packet, **[The packet is rejected, Otherwise, the request is serviced, STEP 610. For example, data is written to or read from a particular device, (Paragraph 0032)].**

Regarding claim 3, 27 Matena teaches the method of claim 2, further comprising:

maintaining a list of services performed by the non-Java-based server nodes, **[a service application controller 104, which is suitable for controlling applications**

that are services 107 including operating-system level processes, (Column 9, line 57)];

and sending notification of a status of each of the listed services to the non-Java-based server nodes in the first instance, **[operations to obtain status information about the nodes, (Column 14, line 31)].**

Regarding claim 4, 28 Matena teaches that the method further comprising: maintaining a list of services performed by the Java-based server nodes, **[a service application controller 104, which is suitable for controlling applications that are services 107 including operating-system level processes, (Column 9, line 57)];**

and sending notification of a status of each of the listed services to the Java-based server nodes in the second instance, **[operations to obtain status information about the nodes, (Column 14, line 31)].**

Regarding claim 5, 29 Matena teaches the method of claim 4, wherein the maintaining a list of services is accomplished by the intermediate server and the sending notification of a status of each of the listed services is accomplished by the intermediate server, **[Fig. 1, Ref # 103].**

Regarding claim 6, 30 Matena teaches that the method further comprising:

implementing Java 2 Platform Enterprise Edition (J2EE) applications in the Java-based server nodes, **[FIG. 30, Ref # J2EE].**

- Claims 7 - 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matena et al. (US 7,302,609), and further in view of Pedersen et al. (US 2003/0037148).

Regarding claim 7, Matena teaches a method comprising: establishing communication between a plurality of non-Java-based server nodes of a first instance and a plurality of Java-based server nodes of a second instance via an intermediate server.

Matena et al. differs from the claimed invention a first instance and a second instance are not taught in Matena et al.

Pedersen et al. teaches a system comprising: a first instance including a plurality of non-Java-based server nodes, each of the non-Java-based server nodes executing software instructions to attach a header to a body of a packet, the header including information to specify that the packet originated from one of the non-Java-based server nodes, **[Fig. 2, Ref # 40, which is an instance with multiple nodes 34, 96, 24];**

a second instance including a plurality of Java-based server nodes, each of the Java-based server nodes executing software instructions to attach a header to a body of a packet, the header including information to specify that the packet originated from one of the Java-based server nodes, **[Fig. 2, Ref # 40, which is an instance with multiple nodes 34, 96, 24, wherein Instance 40 is a parameter handler that registers different instances];**

and a message server coupled between the first and second instances to establish communication there between, **[Fig. 2, Ref # 34, which is a server that sends a message to instance 40].**

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Matena by including a first instance including a plurality of server nodes, each of the server nodes executing software instructions to attach a header to a body of a packet, the header including information to specify that the packet originated from one of the server nodes as taught by Pedersen.

One of ordinary skill in the art would have been motivated to make this modification in order provide the advantage of including a first instance including a plurality of server nodes, each of the server nodes executing software instructions to attach a header to a body of a packet, the header including information to specify that the packet originated from one of the server nodes.

Regarding claim 8, Pedersen et al. teaches the system of claim 7, wherein each of the instances further comprises a dispatcher to distribute client requests to the server nodes of the respective instance, **[Fig. 2, Ref # 30 which is an application requested by client 24, and the instance 40 is the distinct server node].**

Regarding claim 9, Pedersen et al. teaches the system of claim 7, wherein the message server is to route message packets between the non-Java-based server nodes of the first instance and the Java-based server nodes of the second instance, **[Fig. 2, Ref # 54 and 58 wherein the 54 and 58 are messages from and to client node and instance 40].**

Regarding claim 10, Pedersen et al. teaches the system of claim 7, wherein the message server is to assign a service identification associated with each type of services executed on the server nodes, **[Fig. 2, Ref # 80, which is a communication manager that moves the client identifier].**

Regarding claim 11, Pedersen et al. teaches the system of claim 10, wherein the message server includes a service repository to maintain a list of the assigned service identification and corresponding service names, **[Fig. 2, Ref # 40, which maintains a table of addresses].**

Regarding claim 12, Matena teaches that the method further comprising: maintaining a list of services performed by the Java-based server nodes, **[a service application controller 104, which is suitable for controlling applications that are services 107 including operating-system level processes, (Column 9, line 57)];**
and sending notification of a status of each of the listed services to the Java-based server nodes in the second instance, **[operations to obtain status information about the nodes, (Column 14, line 31)].**

Regarding claim 13, Matena teaches the method of claim 4, wherein the maintaining a list of services is accomplished by the intermediate server and the sending notification of a status of each of the listed services is accomplished by the intermediate server, **[Fig. 1, Ref # 103].**

Regarding claim 14, Matena teaches that the method further comprising: implementing Java 2 Platform Enterprise Edition (J2EE) applications in the Java-based server nodes, **[FIG. 30, Ref # J2EE].**

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

- Claims 15 – 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Matena et al. (US 7,302,609).

Regarding claim 15 and 21, Matena teaches a message server comprising: a first communication interface to establish communication with a plurality of non-Java-based server nodes, **[Fig. 6, Ref # 605, which is one or more communication interfaces];** a second communication interface to establish communication with a plurality of Java-based server nodes, **[Fig. 6, Ref # 605, which is one or more communication interfaces];**
and a controller to transfer packets between the non-Java-based server nodes and the Java-based server nodes, **[Fig. 1, Ref # 102, which is an execution controller].**

Regarding claim 16, 22, Matena teaches the message server wherein the controller is to assign a service identification associated with each type of services executed on the server nodes, **[Fig. 1, Ref # 104, which identifies service such as Ref # 107].**

Regarding claim 17, Matena teaches that the message server further comprises: a service repository maintains a list of the assigned service identification and corresponding service names, **[Fig. 11, Ref # Node Group].**

Regarding claim 18, Matena teaches that the message server further comprises: a first repository to maintain a list of services currently being executed on the non-Java-based server nodes, **[Fig. 11, Ref # Node Group];**

and a second repository to maintain a list of services currently being executed on the Java-based server nodes, **[Fig. 11, Ref # Node Group].**

Regarding claim 19, 20, 24 Matena teaches the method of claim 4, wherein the maintaining a list of services is accomplished by the intermediate server and the sending notification of a status of each of the listed services is accomplished by the intermediate server, **[Fig. 1, Ref # 103].**

Regarding claim 23 Matena teaches that the method further comprising: maintaining a list of services performed by the Java-based server nodes, **[a service application controller 104, which is suitable for controlling applications that are services 107 including operating-system level processes, (Column 9, line 57)];**

and sending notification of a status of each of the listed services to the Java-based server nodes in the second instance, **[operations to obtain status information about the nodes, (Column 14, line 31)].**

Conclusion

The following prior art made of record and not relied upon is cited to establish the level of skill in the applicant's art and those arts considered reasonably pertinent to applicant's disclosure. See **PEP 707.05(c)**.

The following are analogous art because they are from the same field of endeavor of System and Method for Managing Communication between server nodes contained within a cluster environment:

- Matena et al. Patent No: (US 7,302,609).
- Brey et al. Pub No: (US 2005/0108395).
- Pedersen et al. Pub No: (US 2003/0037148).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Shaq Taha** whose telephone number is 571-270-1921. The examiner can normally be reached on 8:30am-5pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Jeff Pwu** can be reached on 571-272-6798.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

12/20/07

S. Taha

JEFFREY PWU
SUPERVISORY PATENT EXAMINER